REMARKS

Applicants' undersigned attorney thanks the Examiner for her comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the following remarks. Currently, Claims 1-17, 19-21, and 50-59 are pending.

Information Disclosure Statements

The Examiner has acknowledged receipt of the Fifth Information Disclosure Statement filed 06 October 2004, and has provided Applicants with a copy of the corresponding Form PTO-1449 with her initials next to each reference indicating consideration of the cited references.

Applicants filed a Third Information Disclosure Statement on 26 November 2003. Applicants respectfully request the Examiner's acknowledgment of consideration of each of the references cited in the Third Information Disclosure Statement.

Claim Rejections - 35 U.S.C. §103

A. Melbye et al. in view of Cederblad et al. and Beitz et al.

The rejection of Claims 1-7, 13-15, 20-21, and 50-59 under 35 U.S.C. §103(a) as being unpatentable over Melbye et al. (PCT Publication No. WO 95/34264) in view of Cederblad et al. (U.S. Patent No. 5,885,686) and Beitz et al. (U.S. Patent No. 6,248,097) is respectfully traversed, particularly in view of the following remarks.

As pointed out by the Examiner, Melbye et al. disclose elastic sheet-like composites, disposable garments including such elastic sheet-like composites, and methods of making such elastic sheet-like composites; however, Melbye et al. fail to disclose or suggest sheet-like composites having at least two different types of strands made from at least two different types of materials, or a barrier layer.

Also pointed out by the Examiner, Cederblad et al. disclose an extruded bicomponent elastomeric netting, but fails to disclose or suggest a barrier layer. The Examiner suggests that the extruded strands in one direction consisting

essentially of a first elastic resin component and another set of extruded strands consisting essentially of a second elastic resin component perpendicular to the first set in Cederblad et al. provides the Melbye et al. reference with an alternative embodiment that would provide the elastic material with different zones of elasticity by using two different elastomeric strands instead of producing these areas with an increased quantity of strands in certain regions or using thicker and thinner strands.

The Examiner further points out that Beitz et al. disclose a gusset flap member that can include a barrier layer, and suggests that because the references all involve elastomeric filaments, the purposes disclosed by Cederblad et al. and Beitz et al. would have been recognized in the pertinent art of Melbye et al.

To establish a prima facie case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Despite the fact that Melbye et al., Cederblad et al., and Beitz et al. all involve elastomeric filaments, there is no suggestion or motivation to dissect the concept of using strands of different compositions from the elastomeric netting of Cederblad et al. and the concept of a barrier layer from the gusset flap member of Beitz et al., and to insert these concepts into the elastic sheet-like composites of Melbye et al.

More particularly, the elastic sheet-like composites in Melbye et al. include one or two sheets thermally bonded directly to a multiplicity of molten, extruded elastic strands. The elastic strands are formed by extruding an elastic thermoplastic material through a single extruder die. The single die plate may have varied spacing and/or diameters to provide variable tension. One of the benefits of the invention is that the methods afford "versatility in selecting characteristics of the elastic sheet-like composites to be produced without major modifications of the equipment." (Page 2, lines 3-8). Thus, it would be contrary to the intended purpose of Melbye et al. to form an elastic sheet-like composite having at least two different types of strands made from at least two different types of materials because separate extruders and/or dies would be required to apply the different materials, and the

addition of more extruders and/or dies would be a major modification of the equipment.

Consequently, by disclosing a composite including strands extruded from a single extruder using a method in which no major modifications are made, Melbye et al. teach away from the inclusion of two or more types of strands made from different elastomeric polymers. Furthermore, the proposed modification of using at least two different types of elastomeric materials, which would require the use of at least two extruders and/or dies, would render Melbye et al. unsatisfactory for its intended purpose, which is to provide versatility in selecting characteristics of the elastic sheet-like composites without major modifications of the equipment, and thus change the principle of operation of Melbye et al.

To form the bicomponent elastomeric netting of Cederblad et al., elastic strands necessarily overlap one another. The strands in the machine direction (MD) may have a different composition than the strands in the transverse direction (TD). Cederblad et al. disclose that fabrics and support materials with elastic properties "are expensive to produce, and are significantly different from a fiber formed extruded netting product." (Col. 2, lines 20-27). Cederblad et al. strive to minimize interference with the elasticity of the strands (Col. 4, lines 6-18), thus teaching away from the combination of the netting bonded to any additional materials, such as facing materials. Since Cederblad et al. bluntly state that the material in Cederblad et al. is significantly different from fabrics and support materials with elastic properties, Cederblad et al. thereby teach away from the proposed combination of Melbye et al. and Cederblad et al.

Beitz et al. disclose containment flaps and leg gussets within a garment. The leg gussets are not formed as a sheet-like composite, but instead are formed as separate components specifically configured for application to the garment. The leg gussets may include a barrier layer with a first arrangement of elastomeric members positioned between the barrier layer and the fabric layer within a leg gusset section of the gusset-flap member, and a second arrangement of elastomeric members attached to at least the fabric layer within a containment flap section of the gusset-flap member. However, there is no suggestion in Beitz et al. to form the gusset-flap

member as a sheet-like composite, thus there is no suggestion to create a sheet-like composite having a barrier layer positioned therein.

Another criterion for establishing a prima facie case of obviousness is that there must be a reasonable expectation of success. Absent impermissible hindsight, a person skilled in the art would not logically combine the teachings of Melbye et al. with the teachings of Cederblad et al. and Beitz et al. to render Applicants' claimed invention because Cederblad et al. disclose a netting product and Beitz et al. disclose a gusset-flap member within a garment, whereas Melbye et al. disclose a sheet-like composite. Even if the three references were combined, there would be no suggestion to a person skilled in the art to extract the "two different elastomeric resin" concept from Cederblad et al. and the barrier layer concept from Beitz et al. and insert these concepts into the sheet-like composite of Melbye et al.

Melbye et al. disclose elastic strands that differ in diameter or in spacing between one another to achieve different levels of tension in areas between the strands in the sheet-like composite when the sheet-like composite is stretched in the longitudinal direction. (Page 4, line 21 – Page 5, line 3). In contrast, Cederblad et al. disclose elastomeric performance of the netting itself that can be fine-tuned in both the transverse and longitudinal directions through: (1) the composition of the two elastomeric resin blends, (2) the controlled strand crossover design, and (3) the different degrees of melt orientation. (Col. 4, lines 19-24). Beitz et al. disclose that the elastomeric members within the gusset-flap member may be constructed to provide substantially equal elastic forces, or may be constructed to provide different elastic forces, such as by using individual strands of different diameter or other size, or strands that are configured with different amounts of elongation to thereby provide a gradient or other variation of elastic tensions. There is no suggestion in either Melbye et al., Cederblad et al., or Beitz et al. that using different elastomeric resins will produce effects similar to varying the diameter or spacing of elastic strands. Thus, in the combination of Melbye et al. with Cederblad et al. and Beitz et al. there is no teaching or suggestion to make Applicants' claimed invention, nor is there any reasonable expectation of success.

The only reasonable suggestion that a person skilled in the art could glean from the combination of Melbye et al. and Cederblad et al. would be the incorporation of bi-directional elastic strands, or elastomeric netting, into a sheet-like composite. Even this combination would be unfavorable because the two directions of elastic strands would require two different extruders and/or dies, which, as explained above, would render Melbye et al. inoperable for its intended purpose because Melbye et al.'s intended purpose is to achieve versatility in selecting characteristics of the elastic sheet-like composites without major modifications of the equipment.

Yet another factor in establishing a prima facie case of obviousness is that the prior art references, when combined, must teach or suggest all the claim limitations. Neither Melbye et al. nor Cederblad et al. nor Beitz et al., alone or in combination, disclose or suggest a targeted elastic laminate material having different zones of tension, with filaments in one zone having a different composition than filaments in a second zone. Furthermore, neither Melbye et al. nor Cederblad et al. nor Beitz et al., alone or in combination, disclose or suggest a targeted elastic laminate material having filaments of different compositions bonded to a facing material, wherein the different types of filaments run in the same longitudinal direction. Although Cederblad et al. disclose elastic strands of different compositions, there are no zones of different tension or zones of different compositions. More particularly, in Cederblad et al., the strand composition is constant in the longitudinal direction as well as in the transverse direction, such that all of the non-overlapping strands have the same properties as one another. Thus, the netting is not "targeted" in the sense that the "targeted" elastic materials of the present invention have different tension in different zones in the same longitudinal direction of the material. In contrast, the netting in Cederblad et al. may have different tension in the MD than in the TD, but all of the MD tension is uniform as is all of the tension in the TD. Therefore, a person skilled in the art would find no motivation to combine the teachings of Melbye et al. with the teachings of Cederblad et al. Even if Melbye et al. were combined with Cederblad et al. and Beitz et al., the combination would still fail to achieve the targeted elastic laminate material of the present invention because

neither Melbye et al. nor Cederblad et al. nor Beitz et al., nor the combination thereof, discloses or suggests the combination of strands of different elastic polymers applied in the same longitudinal direction between two facing materials to provide zones of varying tension, along with a barrier layer positioned between at least a portion of each of the facing materials.

For at least the reasons given above, Applicants respectfully submit that the teachings of Melbye et al. in view of Cederblad et al. and Beitz et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

B. Melbye et al., Cederblad et al., and Beitz et al., further in view of Mleziva et al.

The rejection of Claims 8-12, 16-17, and 19 under 35 U.S.C. §103(a) as being unpatentable over Melbye et al., Cederblad et al., and Beitz et al. as applied to Claims 1-7, 13-15, 20-21, and 50-59 above, and further in view of Mleziva et al. (U.S. Patent No. 6,057,024) is respectfully traversed, particularly in view of the following remarks.

As explained above, Melbye et al., Cederblad et al., and Beitz et al., alone or in combination, fail to disclose or suggest the combination of strands of different elastic polymers applied in the same longitudinal direction between two facing materials to provide zones of varying tension, along with a barrier layer positioned between at least a portion of each of the facing materials.

As pointed out by the Examiner, Melbye et al., Cederblad et al., and Beitz et al. further fail to disclose any elastic tension relation between the low tension zone and the high tension zone, they do not disclose employing an elastomeric adhesive to bond the facing layer and the filaments, and they do not disclose using a spunbond material or a meltblown continuous filament composite web for the facing material.

Mleziva et al. disclose a composite elastic material including ribbon-shaped elastic elements joined to an extensible layer. Mleziva et al. fail to disclose or suggest high and low tension zones in the composite elastic material.

Neither Melbye et al., Cederblad et al., Beitz et al., nor Mleziva et al., alone or in combination, disclose or suggest a laminate including at least one low tension zone including a plurality of elastomeric first filaments and at least one high tension zone including a plurality of elastomeric second filaments, wherein the first and second filaments are applied in the same longitudinal direction between two facing materials to provide zones of varying tension, along with a barrier layer positioned between at least a portion of each of the facing materials.

The Examiner suggests that it would have been obvious to one of ordinary skill in the art to use the extrusion processes disclosed in Mleziva et al. to create the facing materials recited in Claims 16 and 17 of the present invention. The Examiner also suggests that it would have been obvious to one of ordinary skill in the art to use an elastomeric adhesive to bond the low and high tension zones to the facing material because Mleziva et al. disclose adhesive bonding of fibers to facing layers as an alternative method to autogeneously bonding the layers and strands.

However, as pointed out above, Melbye et al. emphasize a process that involves no major modifications of the equipment. Since the composites in Melbye et al. are formed by extruding strands of molten thermoplastic material onto the sheet of material to form elastic strands thermally bonded to the sheet of material, major modifications would be required to instead adhesively bond elastic strands to a sheet of material. Additionally, Cederblad et al. teach away from the whole concept of bonding a facing material to elastic strands. For this reason, and the other reasons presented above, the combined teachings of Melbye et al., Cederblad et al., Beitz et al., and Mleziva et al. fail to disclose or suggest the targeted elastic laminate material of Claims 16, 17, and 19 of the present invention.

The Examiner also suggests that it would have been obvious to have optimized the elastomeric material of the present invention by providing the material with first and second strands of specific polymeric materials in order to form a fabric having the desired elastic tension through the process of routine experimentation, based on Cederblad et al.'s use of different elastomeric materials. However, as explained above, Cederblad et al. use all the same polymeric materials in the MD and all the same polymeric materials in the TD, resulting in a netting having uniform

tension in the MD and in the TD, respectively. For this reason, and the other reasons presented above, the combined teachings of Melbye et al., Cederblad et al., Beitz et al., and Mleziva et al. fail to disclose or suggest the targeted elastic laminate material of Claims 8-12 of the present invention.

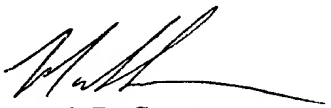
For at least the reasons given above, Applicants respectfully submit that the teachings of Melbye et al., Cederblad et al., and Beitz et al., as applied to Claims 1-7, 13-15, 20-21, and 50-59 above, and further in view of Mleziva et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,



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